Massachusetts Department of Public Health, 305 South Street, Jamaica Plain, MA 02130

What is hepatitis?

Hepatitis is any kind of inflammation (a reaction which can include swelling and pain) of the liver. Hepatitis can be caused by many things including viruses (type of germ), drugs, chemicals and alcohol. At this time, there are five viruses known to affect the liver in particular. In the United States, the most common types of viral hepatitis are hepatitis A, hepatitis B and hepatitis C. These viruses are very different from one another, but all are infectious and may cause similar symptoms. They differ in how they are spread, how long the infection lasts, and how they are treated. A health care provider can test a person's blood for hepatitis A, B and C virus infection.

What is hepatitis B?

Hepatitis B is a liver infection caused by the hepatitis B virus. It can be a serious disease that can lead to cirrhosis (scarring of the liver) and/or liver cancer. Most people who get the disease recover from it and can never get it again. However, about 10% of people who get hepatitis B will go on to have chronic infection (long-term infection) and can pass it on to others (be a carrier). The younger a person is when infected, the more likely he or she is to go on to have chronic infection and to develop serious liver disease.

How is it spread?

The hepatitis B virus is spread by direct contact with blood, semen, vaginal and other body fluids of an infected person. Sharing needles to inject drugs or having sex with an infected person can spread the virus. Health care workers who get stuck with contaminated needles can also get infected if they are not protected by immunity, such as with immunization. Pregnant women who have the virus in their blood can pass it on to their babies at birth. The virus can also be spread by sharing personal items such as a toothbrush, razor, or anything else that may have blood on it. The blood supply in the United States is now tested to prevent the spread of hepatitis B, but in the past, some cases resulted from blood transfusions.

The hepatitis B virus is NOT spread by casual contact such as hugging, sneezing, coughing, or sharing food and drinks. You cannot get hepatitis B by donating blood.

What are the symptoms?

The symptoms of hepatitis B infection may include tiredness, loss of appetite, nausea, stomach ache, and muscle or joint pain. Urine may become darker in color, and then jaundice (yellowing of the skin and whites of the eyes) may appear.

How soon do symptoms appear?

Many people who are infected with hepatitis B have mild symptoms or no symptoms at all, but they can still pass the virus on to others. Symptoms can begin as soon as six weeks to as long as six months after contact with the virus.

How is hepatitis B diagnosed?

Hepatitis B is diagnosed with blood tests. These blood tests can be used to tell the difference between a current infection and a past infection.

How is hepatitis B treated?

Most people with hepatitis B infection get better without treatment. Generally, bed rest is all that is needed. People with chronic hepatitis B infection may be treated with special drugs that fight viruses. People with hepatitis B should avoid drinking alcohol or taking any medications or dietary supplements that are harmful to the liver, as these can make

the liver disease worse. Hepatitis A vaccine may also be recommended to protect the liver against the virus that causes hepatitis A. Ask your doctor about treatment options and steps you can take to protect your liver.

How can I prevent hepatitis B?

For long-term protection from getting infected, hepatitis B vaccine is best. All newborns, children through age 18, and adults who are at risk of hepatitis B infection should get the vaccine. Adults at risk of hepatitis B infection include:

- + People who have multiple sex partners;
- Men who have sex with men;
- **+** People who have sex with infected people;
- * Sex trade workers;
- Injection drug users;
- Household contacts of persons with hepatitis B infection;
- + Health care and public safety workers who may have contact with blood or body fluids;
- Persons undergoing hemodialysis;
- People with hemophilia and others who receive certain blood products;
- Staff and residents who live and work with the developmentally disabled;
- * Travelers to countries and areas where hepatitis B is common;
- * Immigrants, refugees, and adoptees from countries where hepatitis B is common; and
- + Alaskan Natives and Pacific Islanders.

The best way to prevent hepatitis B infection is to avoid contact with the blood and body fluids of infected people, including the following:

- If you inject drugs, never share your needles, syringes and other works with anyone. Wash your hands before and after injecting drugs. Don't share cocaine or snorting straws, since these can get blood on them too. Find out about treatment programs that can help you stop using drugs.
- **+** Use a latex condom every time you have sex.
- Only get tattoos or body piercings where sterile equipment is used.
- Wear protective gloves if you handle blood and body fluids.
- Never share personal items such as toothbrushes and razors.

Is hepatitis B vaccine required for anyone?

In Massachusetts, 3 doses of hepatitis B vaccine are required for all children attending licensed childcare or preschool, and kindergarten through grade 12. Three doses of hepatitis B vaccine are also required for full-time college and graduate students, as well as health science students attending college. Private employers must offer the vaccine to employees (such as health care workers) who might come in contact with blood and body fluids on the job.

Where can I get more information?

- **+** Your doctor, nurse or clinic.
- * Your local board of health (listed in the phone book under local government).
- * The Massachusetts Department of Public Health, Division of Epidemiology and Immunization at: (617) 983-6800 or toll-free at (888) 658-2850, or on the MDPH website at http://www.mass.gov/dph.